Work Orde February-14-13				*970	162*							Page 1
Item ID:	D3898-1			Accept	*N900	040	100) *	Setup	Start	*NI	C1*
Revision ID:					I WM M	`,`,	, ,	•		Ston	-1-5-1	
Item Name:	Floor Protecto	or (206L)								Stop	*N:	S2*
Start Date:	2/08/13	Start Qty: 4.00	*4*		Cust Item I	D:						
Required Date:	2/28/13	Req'd Qty: 4.00	*4*		Customer:							
Reference:			-				_		_	64 - 4		
Approvals:	Process Pla	an: ML5	Date: /3-02-1	Tooling:	Da	ate:			Run	Start	*N	R1*
					D:	ate:				Stop	*N	R2*
Sequence ID/ Work Center II)	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Re Qt	~	Reject Number	Insp. Stamp
Draw Nbr	Rev	vision Nbr										
D3898	Rev	v A										610
100				0.00								07 07 89
100								x4				& <u>8</u> 9
HandThermo		Memo		0.00				,				13/03/01
Hand Finishing The	rmoforming	1-Cut Sheet	to required Blank size									بها رکتار کا
105	«			0.00								DAG.
105 HandThermo		Dry material Memo		0.00				x4				07

Dry Sheet as per QSI022 POLYCARBONATE

Temp: 340°F

Time IN: 7:00 pm 13/03/05

Time OUT: 7:00 am 13/03/06

Hand Finishing Thermoforming

											DQA:	Date:	
NCR:	Yes	/ No				WORK ORDER NON-C	100	VFOR	MANCE / UPDAT	ΓΕ	•	·	
										····	QA Closed:	Date:	
Work Ord	or:					DISPOSITION			,	AGAINST DEF	PARTMENT	PROCESS	
vvork Ora	er.					Rework	1		Skid-tube C	rosstube		Water Jet	Engineering
Part I	No.					Scrap			 	Small Fab	Pro	d. Eng. Coor.	Quality
						Use-as-is			~ —	Finishing		e/Packaging	Other
NCR	No.					Work Order Update]		Large Fab Co	omposite		Supplier	
Root					Descri	tion of work order update		nitial	Action		Sign &		
Cause		Date	Step	Qty	,	or Non-conformance	Ch	ief Eng	Description	on	Date	Verification	QC Inspector
Doc/Data													
Equip/Tooling													
Operator					ļ						i		
Material			ļ										
Setup				ł									
Other					ļ								i
Process			[
Supplier													
Training ·										*			
Unapproved	L			<u> </u>									
						F.	AUL	T CATE	GORY				
Landi	ng (Gear				General		,					-
		Bending			<u></u>	Bend		Grain			Ovalized		Pressure/Forced
	L	Centre No	ot Concer	ntric to	o/s	BOM/Route	L	Hardwa	re		Over/Under	tolerance	Temperature/Cure
		Cracks				Broken/Damaged		Inspect	ion Incomplete		Part Incorred	ct	Weld
		Crushed/	Crimped.			Burrs		Instruct	ions Incomplete/Uncle	ear	Part Lost/Mi	ssing	Wrong Stock Pulled
		Cuffs				Contamination		Mainte	enance		Part Moved		
		Heat Trea	ıt			Countersink		Mislabe	eled		Positioned V	Vrong	

Misread

Out of Calibration

Out of Sequence

Outside Dimensions

Offset

Other

Power Loss/Surge

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

Drill Holes

Drawing

Finish

Folio

W۵	rk	Ω_1	der	ID	97	062
7 7 U	1 1	\ //	ucı	11		UUL

Page 2

February-14-13 1:29:56 PM Item ID: D3898-1 Accept *N900040100* Setup Start **Revision ID:** Floor Protector (206L) Item Name: **Start Date:** 2/08/13 Start Oty: 4.00 Cust Item ID: Req'd Qty: 4.00 Required Date: 2/28/13 **Customer:** Reference: Start Run Process Plan: Date: Tooling: Date: **Approvals:** Stop Date: SPC (Y/N): Date: Reject Reject Set Up/ **Tool ID** Tool # Plan Insp. Sequence ID/ Operation Accept Qty Qty Number **Work Center ID** Description Code **Run Hours** 0.00 110 *110* 0.00 Thermoform Memo 1-Machine Set-Up Thermoforming Machine 2-Pre-heat Tool to required temp. 3-Thermoform as per Dwg and Folio #FTA0xxusing tool DT9501 Dwg Rev: Folio Rev: Visually inspect for proper formation and texture 0.00 140

140 HandThermo

Hand Finishing Thermoforming

Memo

0.00

1-Trim to finished dimensions as per Dwg

150

OC2- Inspect parts off machine FAI/FAIB

0.00

QC

Memo

0.00

Quality Control

Complete FAI document

NCR: Yes / No	WORK ORDER NON-CONF	•	DQA:	Date:
Work Order:	DISPOSITION	AGAINST DEPART	MENT/PRO	CESS
Work Order.		Skid-tube Crosstube	W	ater Jet Engineering
Part No.	Scrap	Machining Small Fab	Prod. En	g. Coor. Quality

										QA Closed:	Dat	e:	
Work Order					DISPOSITION				AGAINST DE	PARTMENT	PROCESS		
Part No	0.				Rework Scrap Use-as-is Work Order Update		Therm	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	l	Water Jet d. Eng. Coor. re/Packaging Supplier	→	eering Quality Other
NCK NC	J				Work Order Opdate	」		targe rab	composite	ļ	Supplier		<u> </u>
Root				Descri	ption of work order update	Ir	nitial	Ac	tion	Sign &			
Cause	Date	Step	Qty	ı	or Non-conformance	Chi	ef Eng	Desc	cription	Date	Verification	QC QC	Inspector
Ooc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training													
Unapproved				<u> </u>		ΔΗ	T CATE	GORY					
Landing	g Gear				General	701	CATE	<u> </u>					
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Bending Centre N Cracks Crushed/ Cuffs Heat Trea Inspectio Ripples in Torque V	Crimped. at n Strip in n Bend Vaves in E	Tube		Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing Finish		Instruct Mainte Mislabe Misread Offset Out of O	ion Incomplete ions Incomplete, enance eled	/Unclear	Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned N	ct issing Vrong	Temper Weld	e/Forced ature/Cure Stock Pulled
	Wave/Tv	•			Folio			Dimensions					

Work	Order ID	97062

97062

Page 3

February-14-13	1:29:56 PN	1								
Item ID: Revision ID:	D3898-1			Accept	*N900	04010	n/* s	etup Start	ı V.	S1*
Item Name:	Floor Protect	tor (206L)						Stop	*N:	S 2*
Start Date:	2/08/13	Start Qty: 4.00	*4*		Cust Item I	D:				
Required Date Reference:	: 2/28/13	Req'd Qty: 4.00	*4*		Customer:					
Approvals:	Process P	lan:	Date:	Tooling:	Da	ate:		Run Star Stop	"IVII	R1*
,	QC:	,,,	Date:	_ SPC (Y/N):	Da	ate:	_	Stop	<u> </u> *N	R2*
Sequence ID/ Work Center l	ID	Operation Description		Set Up/ Run Hours	Tool ID	Tool # Plan		Reject Qty	Reject Number	Insp. Stamp
160		QC5- Inspect part compl	eteness to step on W/O	0.00	4		j d			
160		Memo		0.00 13 3) 7		4_			
Quality Control		Identify as per dwg & St		0.00			,		6	
170 Packaging Packaging		Memo	App9F216	0.00			-/	<u> 13f3f</u>	8 ((T)
180		QC21- Final Inspection	- Work Order Release	0.00						
180 QC Quality Control		Мето		0.00				165	13-0	3-11

W 130311

											2 4,		
NCR:	Yes ,	/ No				WORK ORDER NON-	CON	NFORM	MANCE / UPI		QA Closed:	Date:	
Work Orde	or.				· · · · · · · · · · · · · · · · · · ·	DISPOSITION				AGAINST DEF	PARTMENT	PROCESS	
Part N						Rework Scrap		ſ	Skid-tube Machining	Crosstube Small Fab		Water Jet d. Eng. Coor.	Engineering Quality
NCR 1	No					Use-as-is Work Order Update			Large Fab	Finishing Composite	Rec/Stor	e/Packaging Supplier	Other
Root		- · · · · · · · · · · · · · · · · · · ·			Descri	ption of work order update		nitial	Act	tion	Sign &		
Cause		Date	Step	Qty	(or Non-conformance	Ch	ief Eng	Desci	ription	Date	Verification	QC Inspector
Doc/Data													
Equip/Tooling													
Operator													
Material			,										
Setup			·										
Other													
Process	Ш												
Supplier	Ш												
Training													
Unapproved							<u> </u>						
						F	AUL	T CATE	GORY				
Landi	ng Ge	ear			_	General		1			1		1
	l le	Bending			ı	Bend	1	Grain			Ovalized		Pressure/Forced

Hardware

Maintenance

Out of Calibration

Out of Sequence

Outside Dimensions

Mislabeled

Misread

Offset

Inspection Incomplete

Instructions Incomplete/Unclear

BOM/Route

Contamination

Countersink

Cut Too Short

Drill Holes

Drawing

Finish Folio

Burrs

Broken/Damaged

DOA:

Over/Under tolerance

Part Incorrect

Part Moved

Part Lost/Missing

Positioned Wrong

Power Loss/Surge

Temperature/Cure

Wrong Stock Pulled

Weld

Other

Date:

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Cracks

Cuffs

Heat Treat

Crushed/Crimped

Inspection Strip in Tube

Torque Waves in Extrusion

Centre Not Concentric to O/S

February-14-13 10:48:46 AM

Work Order ID:

97062

Parent Item:

D3898-1

Parent Item Name:

Floor Protector (206L)

Start Date: 2/08/13

Required Date: 2/28/13

Start Qty: 4.00

Required Qty: 4.00

IPP Rev.A New Issue 09/02/06 DL

IPP RevB Add Step 105 Dry Material

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MLEXS.118-90318-08		Purchased	No		THE STATE OF THE S	100	sf	718.0389	10.6	44.631579			\mathcal{M}
Lexan Sheet									72 (Mad. 190a)				<u> </u>

Location therm

Loc Qty 718.0389406 718.038941

Loc Code

44.632 sq 64.

Comments:

												DQA:	Dat	te:	
NCR: Y	Yes	/ No				WORK ORDER NON-C	100	NFORI\	ANCE / UP	DATE		•			
											***	QA Closed:	Da	te:	
Work Orde	or.					DISPOSITION				AGAINS	T DE	PARTMENT	PROCESS		
WOIK Olde	- · ·					Rework			Skid-tube	Crosstub	e 🗌		Water Jet		Engineering
Part N	۷o.					Scrap		1	Machining	Small Fa	b∐		d. Eng. Coor.		Quality
						Use-as-is			noforming	Finishin	~ —	Rec/Stor	e/Packaging		Other
NCR N	No.					Work Order Update]		Large Fab	Composit	e		Supplier		
Root					Descri	ption of work order update	ļ	Initial	Ac	tion	,	Sign &			
Cause		Date	Step	Qty		or Non-conformance	Ch	ief Eng	Desc	ription		Date	Verification	n	QC Inspector
Doc/Data	Ш					•		Ì							
Equip/Tooling	Ш														
Operator															
Material															
Setup	Ш									•					
Other	Ш														
Process	Ш														
Supplier															
Training	Ш						-								
Unapproved							<u> </u>								
						F.	AUL	T CATE	GORY						
Landi	ng G	iear				General		-			_	1		_	7
	Ш	Bending				Bend		Grain				Ovalized			Pressure/Forced
	Ш	Centre N	ot Conce	ntric to	o/s	BOM/Route		Hardwa	re			Over/Under	tolerance	<u></u>	Temperature/Cure
	Ш	Cracks				Broken/Damaged		Inspecti	on Incomplete			Part Incorre	ct	L	Weld
		Crushed/	Crimped.			Burrs		Instruct	ions Incomplete/	'Unclear		Part Lost/Mi	issing		Wrong Stock Pulled
		Cuffs				Contamination		Mainte	nance		L	Part Moved			
		Heat Trea	at			Countersink		Mislabe	led		L	Positioned V	Vrong		_
		Inspectio	n Strip in	Tube		Cut Too Short		Misread	i			Power Loss/	'Surge		Other
		Ripples in	Bend	•		Drill Holes		Offset							

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

Folio

DART AEROSPA	CE LTD			Wo	rk Order:	97062
Description: Floor F	Protector	·		Pa	rt Number:	D3898-1
Inspection Dwg: D3	898 Rev : A					Page 1 of 1
	X	RTICLE INSF First Article HERMOFORM		Prototyp		
Description			Accept	Reject	Method of Inspection	Comments
Inside Radii less thai	n N/A"					
Shape Definition						
Texture Retention			-			
Material imperfection scratching	ns such as bumps,	cracks, voids,	· /			
		,				
						1
			<u></u>	L		
Measured by:	Wh				Date	13/03/06
		TRIMMING	SECTIO	N		(
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.50	Min	0.56"	· ,			
1.00	Min	1.04"				
5.6	+0.2/-0.0	5,63"				
0.080	Min	0.083"	1			
0.050	Min	0.068"				
0.000		0.060	L			:
Measured by	v: 1 1/4]		Date:	(3/03/07
Audited by]		Date:	
Prototype Approva		'A]		Date:	
			J		L	
	nange				Revise KJ	d Approved
A 09.09.15 Ne	ew Issue				110	-1 /) -

D3898-1 FLOOR PROTECTOR (206L)

SHOT OF Y RI TIRNEO ENGINETP1::G UNCONTROLLED (COM SUBJECT TO AMENUA . . WITHOUT NOT'S F WORK OIGHER NO. 97062 MCS 13-02-15

NOTES:
1) MATERIAL: LEXAN 90318 (PROTECT-A-GLAZE), 0.118 THICK, 112-CLEAR (MLEXS.118-90318-08)
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3898-1" USING VIBRATING STYLUS

7) WEIGHT: 5.0 lbs 8) TOOLING: THERMOFORM PER MOLD DT9501 PER DART QSI 022. TRIM PER MOLD 9) MINIMUM THICKNESS: 0.050" EXCEPT AS SHOWN

A NEW ISSUE 09.02.27 REV. DESCRIPTION DATE BY DESIGN DART AEROSPACE LTD DRAWN HAWKESBURY, ONTARIO, CANADA CHECKED REV. A D3898 MFG. APPR. SHEET 1 OF 2 APPROVED TITLE SCALE FLOOR PROTECTOR (206L) DE APPR. NTS DATE 09.02.27

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